Test Bank for Personal Finance 2nd Edition by Bajtelsmit

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Test Bank

Chapter 2 Test Bank
To accompany *Personal Finance*, 2nd edition, by Vickie Bajtelsmit

Summary: 67 questions: 64 Multiple Choice | 3 Multiple Select

LO 2.1	19	28%	Easy	10	15%
LO 2.2	22	33%	Medium	53	79%
LO 2.3	15	22%	Hard	4	6%
LO 2.4	11	16%		67	
	67				

Knowledge	9	13%
Comprehensive	24	36%
Application	11	16%
Analysis	19	28%
Evaluation	2	3%
Synthesis	2	3%
	67	

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1. It is recommended that tax records be kept
   A) 3 years, because most IRS audits occur within three years of filing a return.
   B) 5 years, because most IRS audits occur within five years of filing a return.
   C) 7 years, because most IRS audits occur within three years of filing a return.
   D) 7 years, because most IRS audits occur within five years of filing a return.

   Answer: C
   Solution: Any documents that support tax deductions should be filed with your tax records. Although most Internal Revenue Service (IRS) audits occur within three years of filing a return; they can also occur later, so it's generally recommended that you keep tax records for seven years to be safe.
   Format: Multiple Choice
   Title: Test Bank 2.1 How Long Should You Keep Records
   Section: What Financial Records Do You Need to Keep?
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Medium
   Bloomcode: Comprehension
   AACSB: Comprehension
   Expected Time to Complete: 1 minute

2. Bills for utilities, telephone, car expenses, and other irregular expenses that are not tax deductible should be kept for

   A) one month.
   B) one year.
   C) five years.
   D) seven years.

   Answer: B
   Solution: Bills for utilities, telephone, car expenses, and other irregular expenses that are not tax-deductible should be kept for a full year so that you can accurately report the costs in your budget and personal cash flow statements.
   Format: Multiple Choice
   Title: Test Bank 2.1 How Long Should You Keep Records
   Section: What Financial Records Do You Need to Keep?
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Format: Multiple choice
   Section: 2.1
   Learning Objective: 2.1
   Difficulty: Easy
   Bloomcode: Knowledge
   AACSB: Comprehension

Expected Time to Complete: 1 minute

3. A _____ is considered more secure than a _____ because it is a locked box at a remote location, which means thieves cannot access it during a home robbery.
   A) safe deposit box; lockbox
   B) lockbox; safe deposit box
   C) lockbox; dropbox
   D) dropbox; safe deposit box

   Answer: A
   Solution: A safe deposit box is considered more secure than a lockbox in your home because it is a locked box at a remote location, such as a bank, which means thieves cannot access it during a home robbery.
   Format: Multiple Choice
   Title: Test Bank 2.1 Where Should You Keep Important Documents
   Section: What Financial Records Do You Need to Keep?
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Medium
   Bloomcode: Comprehension
   AACSB: Reflective
   Expected Time to Complete: 1 minute

4. Which of the following is an asset?

   A) Student loans
   B) Home mortgage
   C) Automobile
   D) Credit card balance

   Answer: C
   Solution: An automobile is an asset. Loans are liabilities (debt).
   Format: Multiple Choice
   Title: Test Bank 2.1 Assets
   Section: Summarizing Your Financial Condition
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Easy
   Bloomcode: Comprehension
   AACSB: Comprehension
   Expected Time to Complete: 1 minute

5. Which of the following information is included on a household's personal balance sheet? (Select any two.)

   A) The total annual earnings
   B) The value of everything that the household owns
   C) The total annual debt payments
   D) The amount of all debts owed to others
   E) Household income
   F) Household expenses
   G) Household budget

   Answer: B and D
   Solution: A personal balance sheet is a financial statement that details the value of everything you own and subtracts what you owe to others.
   Format: Multiple Select
   Title: Test Bank 2.1 Balance Sheet
   Section: Summarizing Your Financial Condition
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Medium
   Bloomcode: Comprehension
   AACSB: Analytic
   Expected Time to Complete: 1 minute

6. Liquid assets are

   A) cash or near-cash assets that can be easily converted to cash without loss of value.
   B) assets you can easily sell.
   C) assets related to water and mineral rights.
   D) assets that are used for investment purposes.

   Answer: A
   Solution: Liquid assets are cash and near-cash assets that can easily be converted to cash without loss of value. Checking and savings accounts are examples of liquid assets.
   Format: Multiple Choice
   Title: Test Bank 2.1 Liquid Assets
   Section: Summarizing Your Financial Condition
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Easy
   Bloomcode: Knowledge
   AACSB: Comprehension
   Expected Time to Complete: 1 minute

7. Which of the following best defines market value?

   A) The price that was paid for the asset
   B) The price that an asset could be sold for today
   C) The purchase price of an asset minus depreciation
   D) The purchase price of an asset plus depreciation

   Answer: B
   Solution: The market value is the price you could sell an asset for today. This is usually not the same as what you paid for the asset.
   Format: Multiple Choice
   Title: Test Bank 2.1 Valuing Your Assets and Debts
   Section: Summarizing Your Financial Condition
   Learning Objective: 2.1 Develop a system for financial record keeping and prepare a personal balance sheet.
   Difficulty: Easy
   Bloomcode: Knowledge
   AACSB: Comprehension
   Expected Time to Complete: 1 minute

8. If you borrow to buy a new car with a note, which of the following items on the balance sheet will be affected?

   A) Assets Only
   B) Debts Only
   C) Assets and Debts
   D) Unable to Determine

   Answer: C
   Solution: For some assets, such as your car, there may be corresponding debt that was used to purchase it. In this case, a loan was used to purchase the care. Hence, the market value in the car will be included in the asset section of your balance sheet and the loan balance in the debt section.
   Format: Multiple Choice
   Title: Test Bank 2.1 Valuing Your Assets and Debts
   Section: Summarizing Your Financial Condition
   Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
   Difficulty: Medium
   Bloomcode: Application
   AACSB: Analytic
   Expected Time to Complete: 1 minute

9. If you lease a new car, which of the following items on the balance sheet will be affected?

A) Assets only
B) Debts only
C) Assets and debts
D) Unable to determine

Answer: B
Solution: If you lease a car, your payment obligations are a debt; but you don't own the car, so you shouldn't include it as an asset.
Format: Multiple Choice
Title: Test Bank 2.1 Valuing Your Assets and Debts
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 1 minute

10. If you have an insurance policy that has a cash surrender value,

A) this represents an asset for you.
B) this represents a liability for you.
C) no value is entered on the balance sheet unless the policy is surrendered.
D) the premiums still due are subtracted from the surrender value to arrive at market value.

Answer: A
Solution: An insurance policy is counted as an asset only if it's a policy that accumulates cash value over time. If you cancel an insurance policy that has a cash surrender value, the insurer will return that amount of money to you. Because this is an available source of cash to you, you should count it as an asset.
Format: Multiple Choice
Title: Test Bank 2.1 Valuing Your Assets and Debts
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Application
AACSB: Reflective
Expected Time to Complete: 1 minute

11. A _____ shows only a single point in time, whereas a _____ reflects transactions that occur over a period of time.
A) personal cash flow statement; personal balance sheet

B) personal balance sheet; personal cash flow statement
C) personal cash flow statement; net worth
D) personal balance sheet; net worth

Answer: B
Solution: A personal balance sheet shows only a single point in time, whereas a personal cash flow statement reflects transactions that occur over a period of time.
Format: Multiple Choice
Title: Test Bank 2.1 Your Financial Condition
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Reflective
Expected Time to Complete: 1 minute

12. Which assets are considered liquid assets? (Select any two.)
A) Money market accounts
B) Market value of automobile(s)
C) Home furnishings
D) Cash value of life insurance
E) Individual retirement account(s)

Answer: A and D
Solution: Liquid assets are cash and near-cash assets that can easily be converted to cash without loss of value. Money market accounts and life insurance with cash value are examples of liquid assets.
Format: Multiple Select
Title: Test Bank 2.1 Liquid Assets
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

13. You purchased a car at the beginning of the year for $35,000 and you noticed a similar used car just sold for $28,000. You financed the purchased with a $30,000 auto loan and paid $5,000 from your savings. If your loan balance is currently $23,635, what is the current market value?
A) $28,000
B) $28,635

C) $35,000
D) $21,635

Answer: A
Solution: The market value is the price you could sell the asset for today. Since a similar used car was sold for $28,000, it represents the closest value that your car can be sold.
Format: Multiple Choice
Title: Test Bank 2.1 Market Value
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

14. Which of the following formulas is used to calculate personal net worth?

A) Total assets + Total debts
B) Total assets - Total debts
C) Total debts - Total assets
D) Liabilities - Unpaid bills

Answer: B
Solution: A personal balance sheet is a financial statement that details the value of everything you own (assets) and subtracts what you owe to others (debts) to arrive at your net worth.
Format: Multiple Choice
Title: Test Bank 2.1 How Much Are You Worth Today
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Easy
Bloomcode: Knowledge
AACSB: Analytic
Expected Time to Complete: 1 minute

15. Your assets total $100,000. Your total debts are $80,000. Your net worth is

A) $20,000.
B) $180,000.
C) 0.8%.
D) 1.2%.

Answer: A

Solution: Net worth = Total assets - Total debts
Net worth = $100,000 in assets - $80,000 in debts = $20,000
Format: Multiple Choice
Title: Test Bank 2.1 Net Worth Calculation
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

16. What is Veronica's net worth if her assets total $15,000, her gross income is $40,000, her student loan debt is $20,000 (she has no other debts), and her annual expenses (including taxes) total $38,000?

A) $2,000
B) $5,000
C) -$5,000
D) -$18,000

Answer: C
Solution: Net worth = Total assets - Total debts
Net worth = $15,000 in assets - $20,000 in debts = -$5,000
Format: Multiple Choice
Title: Test Bank 2.1 Net Worth Calculation
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

17. Carlos has a net worth of $450,000 and debts worth $300,000. What amount of assets does Carlos have?

A) $750,000
B) $300,000
C) $150,000
D) No debt

Answer: A
Solution: Net worth = Total assets - Total debts
$450,000 = *assets* - $300,000 in debts = $750,000
Format: Multiple Choice

Title: Test Bank 2.1 Balance Sheet Calculation
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 1 minute

18. Jane has liquid financial assets of $25,000, real estate assets of $125,000, credit card debt of $1,000, and an $89,000 mortgage. Calculate her net worth.

A) $240,000
B) $150,000
C) $90,000
D) $60,000

Answer: D
Solution: Net worth = Total assets - Total debts
Total Assets = $25,000 financial assets + $125,000 real estate = $150,000
Total Debts = $1,000 credit card + $89,000 mortgage = $90,000
Net worth = $150,000 in assets - $90,000 in debts = $60,000
Format: Multiple Choice
Title: Test Bank 2.1 Net Worth Calculation
Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Hard
Bloomcode: Synthesis
AACSB: Analytic
Expected Time to Complete: 3 minutes

19. Insolvency occurs when a person

A) has a positive net worth but is unable to pay his or her debt obligations with current income.
B) has positive net worth but must sell existing assets to pay his or her debt obligations.
C) is unable to pay his or her debt obligations as they come due.
D) has spending exceeding income.

Answer: C
Solution: Insolvency is the inability to pay your debts as they come due, because your total debts exceed your total assets.
Format: Multiple Choice
Title: Test Bank 2.1 Insolvency

Section: Summarizing Your Financial Condition
Learning Objective: 2.1 Develop a system for financial record keeping, and prepare a personal balance sheet.
Difficulty: Medium
Bloomcode: Comprehension
AACSB:
Expected Time to Complete: 1 minute

20. A financial statement used to evaluate the relationship between your income and expenditures is known as a

A) personal balance sheet.
B) personal cash flow statement.
C) cost-benefit statement.
D) liquidity statement.

Answer: B
Solution: A personal cash flow statement is a financial statement used to evaluate the relationship between your income and your spending.
Format: Multiple Choice
Title: Test Bank 2.2 Income and Expenditures
Section: Evaluating Your Personal Financial Situation
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Easy
Bloomcode: Knowledge
AACSB: Analytic
Expected Time to Complete: 1 minute

21. A personal cash flow statement

A) shows income and expenditures at one specific point in time.
B) uses the same information needed for the personal balance sheet.
C) shows income and expenditures over a period of time.
D) is necessary for calculating one’s net worth.

Answer: C
Solution: Where your personal balance sheet is a snapshot of your financial condition at a certain point in time, your personal cash flow statement shows inflows and outflows of cash over a period of time, often one month or one year.
Format: Multiple Choice
Title: Test Bank 2.2 Personal Cash Flow Statement
Section: The Personal Cash Flow Statement
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Easy

Bloomcode: Knowledge
AACSB: Comprehension
Expected Time to Complete: 1 minute

22. When recording inflows and outflows of cash for the cash flow statement, it is important to

A) monitor your spending for at least two years to get an accurate picture.
B) continue your normal spending behavior.
C) record assets at their market value.
D) track inflows more than outflows.

Answer: B
Solution: It is important not to alter your normal spending behavior, even temporarily, because what you record is the basis of future budgeting. You need to incorporate expenses accurately in your log, so that you can more realistically evaluate your current finances.
Format: Multiple Choice
Title: Test Bank 2.2 Recording Cash Outflows
Section: The Personal Cash Flow Statement
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Reflective
Expected Time to Complete: 1 minute

23. Which of the following information is included on a household's personal cash flow statement? (Select any two.)

A) The value of all household assets
B) The amount of all debts owed to others
C) Household income
D) Household expenses
E) Value of your car
F) Mortgage balance

Answer: C and D
Solution: A personal cash flow statement is a financial statement used to evaluate the relationship between your household income and your household spending (expenses).
Format: Multiple Select
Title: Test Bank 2.2 Personal Cash Flow Statement
Section: The Personal Cash Flow Statement
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.

Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

24. Which is not a source of income in a personal cash flow statement?
    A) Scholarships
    B) Cash allowances or gifts from your parents or others
    C) Tax refund
    D) Alimony received

Answer: C
Solution: Scholarships, cash allowances or gifts from your parents or others, and alimony received are sources of income. A tax refund is a return of a payment (expense), not income.
Format: Multiple Choice
Title: Test Bank 2.2 Cash Inflows
Section: The Personal Cash Flow Statement
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Reflective
Expected Time to Complete: 1 minute

25. Fixed expenses are

    A) different dollar amounts each month.
    B) the same percentage of a person's income each month.
    C) the same dollar amount in each payment period.
    D) more common than variable expenses.

Answer: C
Solution: Fixed expenses are expenditures that easy to identify and track because they are the same from month to month, such as rent and car loan payments.
Format: Multiple Choice
Title: Test Bank 2.2 Fixed Expenses
Section: The Personal Cash Flow Statement
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Easy
Bloomcode: Knowledge
AACSB: Analytic
Expected Time to Complete: 1 minute

26. To get a realistic picture of actual expenditures, it is recommended that you keep a _____ spending log for at least a _____.
    A) daily; week
    B) daily; month
    C) weekly; month
    D) monthly; year

    Answer: B
    Solution: To get a realistic picture of actual expenditures, it is recommended that you keep a *daily* spending log to track your expenditures for at least a month to be sure that you've included even irregular cash outflows. At the end of the time period you have chosen, you can total the amounts entered in your spending log to put into your personal cash flow statement.
    Format: Multiple Choice
    Title: Test Bank 2.2 Spending Log
    Section: The Personal Cash Flow Statement
    Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
    Difficulty: Medium
    Bloomcode: Comprehension
    AACSB: Comprehension
    Expected Time to Complete: 1 minute

27. What is Veronica's net cash flow if her assets total $15,000, her gross income is $40,000, her student loan debt is $20,000 (she has no other debts), and her annual expenses (including taxes) total $38,000?

    A) $2,000
    B) $5,000
    C) -$5,000
    D) -$18,000

    Answer: A
    Solution: Net cash flow = Total cash inflows − Total cash outflows
    Net cash flow = $40,000 cash inflows − $38,000 cash outflows = $2,000
    Format: Multiple Choice
    Title: Test Bank 2.2 Net Cash Flow Calculation
    Section: Net Cash Flow
    Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
    Difficulty: Medium
    Bloomcode: Analysis
    AACSB: Analytic
    Expected Time to Complete: 2 minutes

28. The savings ratio will be negative if

A) cash inflows exceed cash outflows.
B) cash outflows exceed cash inflows.
C) assets exceed debts.
D) debts exceed assets.

Answer: B
Solution: The savings ratio will be negative if cash outflows exceed cash inflows. A negative savings ratio means that, rather than saving, you are accumulating more debt.
Format: Multiple Choice
Title: Test Bank 2.2 Negative Savings Ratio
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 1 minute

29. The liquidity ratio measures
A) how many years you could pay your monthly expenses from your assets.
B) how many months you could pay your monthly expenses from your liquid assets.
C) the number of times that your liquid assets exceed your water bill.
D) the number of times that your assets exceed your debts.

Answer: B
Solution: The liquidity ratio measures how many months you could pay your monthly expenses from your liquid assets.
Format: Multiple Choice
Title: Test Bank 2.2 Liquidity Ratio
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

30. Don has assets of $5,000, of which $1,800 are in checking and savings accounts. His annual expenses are $15,000. Don’s liquidity ratio would be

A) 0.120.
B) 0.333.
C) 1.440.
D) 4.000.

Answer: C
Solution: $\text{Liquidity ratio} = \frac{\text{Liquid assets}}{\text{Monthly expenses}}$

$$\text{Liquidity ratio} = \frac{\$1{,}800}{(\$15{,}000/12 \text{ months})} = 1.44$$

Format: Multiple Choice
Title: Test Bank 2.2 Liquidity ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

31. You have the following financial information on the Haring family:

Total assets (including a house)	$300,000
Checking and savings account	$10,000
Monthly after-tax income	$5,500
Total monthly expenses	$5,000
Monthly savings	$300
Monthly debt payments	$2,000
Total debt (including mortgage)	$280,000

What is the Haring family's liquidity ratio?

A) 1.5
B) 2.0
C) 2.5
D) 3.0

Answer: B
Solution: $\text{Liquidity ratio} = \frac{\text{Liquid assets}}{\text{Monthly expenses}}$

$$\text{Liquidity ratio} = \frac{\$10{,}000}{\$5{,}000} = 2.0$$

Format: Multiple Choice
Title: Test Bank 2.2 Liquidity Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium

Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 3 minutes

32. You have the following financial information on the Haring family:

Total assets (including a house)	$300,000
Checking and savings account	$10,000
Monthly after-tax income	$5,500
Total monthly expenses	$5,000
Monthly savings	$300
Monthly debt payments	$2,000
Total debt (including mortgage)	$280,000

What is the Haring family's debt payment ratio?

A) 25%
B) 28%
C) 30%
D) 36%

Answer: D
Solution: $\text{Debt payment ratio} = \frac{\text{Total monthly debt payments}}{\text{After-tax monthly income}}$

$$\text{Debt payment ratio} = \frac{\$2{,}000}{\$5{,}500} = 0.3636 \text{ or } 36\%$$

Format: Multiple Choice
Title: Test Bank 2.2 Debt Payment Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 3 minutes

33. You have the following financial information on the Haring family:

Total assets (including a house)	$300,000
Checking and savings account	$10,000
Monthly after-tax income	$5,500
Total monthly expenses	$5,000
Monthly savings	$300
Monthly debt payments	$2,000
Total debt (including mortgage)	$280,000

What is the Haring family's savings ratio?

A) 4%
B) 5%
C) 10%
D) 18%

Answer: B
Solution: $\text{Savings ratio} = \frac{\text{Monthly savings}}{\text{After-tax monthly income}}$

$$\text{Savings ratio} = \frac{\$300}{\$5{,}500} = 0.0545 \text{ or } 5\%$$

Format: Multiple Choice
Title: Test Bank 2.2 Savings Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 3 minutes

34. Which personal financial ratio measures the percent of your total assets that you've financed with debt?
    A) Debt ratio
    B) Debt payment ratio
    C) Mortgage debt service ratio
    D) Liquidity ratio

Answer: A
Solution: The debt ratio measures the percent of your total assets that you've financed with debt. The debt payment ratio and the mortgage debt service ratio measure your ability to pay your financial obligations. The liquidity ratio tells you how many months you could pay your monthly expenses from your liquid assets.
Format: Multiple Choice
Title: Test Bank 2.2 Debt Ratios
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

35. Gross monthly income = $3,500
After-tax monthly income = $2,970
Total debt = $86,000
Total monthly debt payments = $402
Total assets = $113,000

Based on the information given, what is the debt ratio?

A) 3%
B) 47%
C) 76%
D) 131%

Answer: C
Solution: $\text{Debt ratio} = \frac{\text{Total debts}}{\text{Total assets}}$

$$\text{Debt ratio} = \frac{\$86{,}000}{\$113{,}000} = 0.76 \text{ or } 76\%$$

Format: Multiple Choice
Title: Test Bank 2.2 Debt Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

36. The debt payment ratio estimates the percentage of _____ that is used to cover required monthly _____ on all debts.
A) after-tax income; minimum payments
B) total income; minimum payments
C) after-tax income; average payments
D) total income; average payments

Answer: A
Solution: The debt payment ratio estimates the percentage of *after-tax income* that is used to cover required monthly *minimum debt payments* of all debts.
Format: Multiple Choice
Title: Test Bank 2.2
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.

Difficulty: Medium
Bloomcode: Comprehensive
AACSB: Analytic
Expected Time to Complete: 1 minute

37. The mortgage debt service ratio measures the percentage of your gross income that you pay in
    A) mortgage payments.
    B) mortgage payments and property taxes.
    C) mortgage payments and homeowner's insurance.
    D) mortgage payments, property taxes, and homeowner's insurance.

Answer: D
Solution: The mortgage debt service ratio measures the percentage of your gross income that you pay in mortgage payments, property taxes, and homeowners' insurance.
Format: Multiple Choice
Title: Test Bank 2.2 Mortgage Debt Service Ratio
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

38. If interest rates increase significantly in the future, in what ways will your borrowing decisions and financial ratios be impacted?
    A) Higher rates will increase the amount of loan you can obtain because your debt payment ratios will increase.
    B) Higher rates will increase the amount of loan you can obtain because your debt payment ratios will decrease.
    C) Higher rates will reduce the amount of loan you can obtain because your debt payment ratios will increase.
    D) Higher rates will reduce the amount of loan you can obtain because your debt payment ratios will decrease.

Answer: C
Solution: Higher rates will reduce the amount of loan you can obtain because your debt payment ratios will increase. Monthly debt payment will increase by the higher rate, while your income remains the same.
Format: Multiple Choice
Title: Test Bank 2.2 Measuring Debt Usage
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.

Difficulty: Hard
Bloomcode: Evaluation
AACSB: Analytic
Expected Time to Complete: 3 minutes

39. You estimate your monthly mortgage principal and interest will be $1,000, property taxes will be $160 per month, and homeowner's insurance will be $50 per month. If your gross monthly income is $4,000 per month and your tax rate is 20 percent, what is your mortgage debt service ratio?

A) 30.25%
B) 37.80%
C) 60.50%
D) 65.20%

Answer: A
Solution: $\text{Mortgage debt service ratio} = \frac{\text{Principal + Interest + Property taxes + Insurance}}{\text{Gross monthly income}}$

$$\text{Mortgage debt service ratio} = \frac{\$1{,}000 + \$160 + \$50}{\$4{,}000} = 0.3025 \text{ or } 30.25\%$$

Format: Multiple Choice
Title: Test Bank 2.2 Mortgage Debt Service Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

40. Borrowing at _____ is a major reason for the _____ standard of living in the United States.
    A) low interest rates; declining
    B) high interest rates; declining
    C) low interest rates; rising
    D) high interest rates; rising

Answer: C
Solution: Access to low interest credit has been a major reason for the rising standard of living in the United States. Purchasing large assets like homes and autos over a manageable period of time raises the standard of living.
Format: Multiple Choice
Title: Test Bank 2.2 Measuring Debt Usage
Section: Using Financial Ratios

Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

41. Tyler's monthly gross income is $4,200 and his monthly after-tax income is $3,400. He saves approximately $300 a month. What is his savings ratio?

A) 7.14%
B) 8.80%
C) 18.00%
D) 38.00%

Answer: B
Solution: : $\text{Savings ratio} = \frac{\text{Monthly savings}}{\text{After–tax monthly income}}$

$$\text{Savings ratio} = \frac{\$300}{\$3{,}400} = 0.088 \text{ or } 8.8\%$$

Format: Multiple Choice
Title: Test Bank 2.2 Savings Ratio Calculation
Section: Using Financial Ratios
Learning Objective: 2.2 Prepare a personal cash flow statement, and evaluate your financial situation using financial ratios.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

42. The basic idea of time value of money is that $1 to be received in the _____ is worth _____$1 received today because of the value of the compound interest.

A) past; less than
B) future; less than
C) future; more than
D) past; the same as

Answer: B
Solution: The basic idea of the time value of money is this: Money received today is worth more than the same dollar amount to be received in the future. This is true; because, if you get an amount of money today, you can invest it to earn compound interest so that it will grow over time.
Format: Multiple Choice

Title: Test Bank 2.3 Time Value of Money
Section: The Power of Compound Interest
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 2 minutes

43. _____ occurs when you earn interest on your investment balance and then leave the interest in the account so that you earn future interest on the__.
    A) Compounding; original balance
    B) Discounting; original balance
    C) Compounding; original balance plus the accumulated interest earnings
    D) Discounting; original balance plus the accumulated interest earnings

Answer: C
Solution: *Compounding* occurs when you earn interest on your investment balance and then leave the interest in the account so that you earn future interest on the *original balance plus the accumulated interest earnings*.
Format: Multiple Choice
Title: Test Bank 2.3 Compounding
Section: The Power of Compound Interest
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

44. The time value of money is a good argument against saving money in a piggy bank at home, because the money will
    A) gain purchasing power over time due to inflation.
    B) lose purchasing power over time due to inflation.
    C) maintain purchasing power over time despite inflation.
    D) maintain purchasing power over time due to inflation.

Answer: B
Solution: The time value of money is a good argument against saving money in a piggy bank at home, because the money will lose purchasing power over time due to the eroding effects of inflation.
Format: Multiple Choice
Title: Test Bank 2.3 Inflation
Section: The Power of Compound Interest
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic

Expected Time to Complete: 2 minutes

45. You want to know how much $10,000 invested today is going to be worth 10 years from now. Which type of time value of money calculation should be used to solve this problem?

A) Present value of a lump sum
B) Future value of a lump sum
C) Present value of an annuity
D) Future value of an annuity

Answer: B
Solution: You are solving for the future value of a $10,000 lump sum.
Format: Multiple Choice
Title: Test Bank 2.3 TVM Method
Section: Time Value of Money Calculation Methods
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

46. You invest $1,000 today and earn 10% interest, compounded annually. How much will you have in five years?

A) $1,475.19
B) $1,550.26
C) $1,610.51
D) $1,720.82

Answer: C
Solution: Calculate the future value of a $1,000 lump sum in five years at 10% APY.

Financial Calculator:
Input N=5, I/Y=10, PV=-1,000, and Solve for FV = 1,610.51

Excel Function: “=FV(Rate, Nper, Pmt, PV, Type)”
=FV(0.10, 5, 0, -1000, 0) => 1,610.51

TVM Equation: Future value of a lump sum (FV) = $PV \times (1 + i)^n$
Future value of a lump sum (FV) = $\$1{,}000 \times (1 + 0.10)^5 = \$1{,}610.51$

Format: Multiple Choice
Title: Test Bank 2.3 FV Lump-Sum Calculation
Section: Future Value: How Much Will My Money Grow?

Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

47. You deposit $200 today into a bank account. If the account earns 8% annually, how much will you have at the end of 10 years.

A) $93
B) $432
C) $2,897
D) $3,329

Answer: B
Solution: Calculate the future value of a $200 lump sum in 10 years at 8% APY.

Financial Calculator:
Input N=10, I/Y=8, PV=-200, and Solve for FV = 431.78 or 432

Excel Function: "=FV(Rate, Nper, Pmt, PV, Type)"
=FV(0.08, 10, 0, -200, 0) => 431.78 or 432

TVM Equation: Future value of a lump sum (FV) = $PV \times (1 + i)^n$
Future value of a lump sum (FV) = $\$200 \times (1 + 0.08)^{10} = \$431.78$ or $432

Format: Multiple Choice
Title: Test Bank 2.3 FV lump-sum Calculation
Section: Future Value of a Lump Sum
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

48. If you receive a series of equal end-of-year payments over several years, this is an example of

A) a perpetuity.
B) an ordinary annuity.
C) an annuity due.
D) compounding.

Answer: B

Solution: An annuity is a series of payments of equal dollar amounts made at regular intervals for a period of time. An ordinary annuity is one in which each payment occurs at the end of the period.
Format: Multiple Choice
Title: Test Bank 2.3 Equal Series of Payments
Section: Future Value: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

49. An annuity is a series of _____ payments made at _____, for a period of time.
    A) equal; monthly intervals
    B) equal; regular intervals
    C) increasing; regular intervals
    D) decreasing; regular intervals

Answer: B
Solution: An annuity is a series of equal payments made at regular intervals, for a period of time. Intervals doesn't have to be monthly.
Format: Multiple Choice
Title: Test Bank 2.3 Annuity
Section: Future Value: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

50. An annuity due is a type of annuity in which each payment is made or received at

    A) the end of a period
    B) the beginning of a period
    C) predetermined intervals within a period
    D) any time

Answer: B
Solution: An annuity is a series of payments of equal dollar amounts made at regular intervals for a period of time. An annuity due is one in which each payment occurs at the *beginning* of the period.
Format: Multiple Choice
Title: Test Bank 2.3 Annuity Due
Section: Future Value: How Much Will My Money Grow?

Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Easy
Bloomcode: Knowledge
AACSB: Analytic
Expected Time to Complete: 1 minute

51. Which of the following is true regarding future value, all else equal?

A) The longer the term, the lower the future value.
B) The higher the interest rate, the lower the future value.
C) The shorter the term, the higher the future value.
D) The lower the interest rate, the lower the future value.

Answer: D
Solution: Interest rates have a positive relationship to the future value. The lower the interest rate the lower the future value, and the higher the interest rate, the higher the future value.
Format: Multiple Choice
Title: Test Bank 2.3 Interest Rates and TVM
Section: Future Value: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

52. In order to determine how much, you would need to save annually to finance your child's college education in 10 years, you would use the

A) future value of a lump sum.
B) future value of an annuity.
C) present value of a lump sum.
D) present value of an annuity.

Answer: B
Solution: You would use the future value of an annuity to determine the annual savings required to fund the cost of college 10 years from now.
Format: Multiple Choice
Title: Test Bank 2.3 TVM
Section: Future Value: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

53. You save $250 at the end of every month from your paycheck. If you can earn 6% APY, compounded monthly, how much will you have saved in 5 years?
    A) $15,000
    B) $16,911
    C) $17,443
    D) $20,406

    Answer: C
    Solution: Calculate the future value of a $250 annuity for 60 months at a 6% APY (0.5% monthly periodic rate). The monthly periodic rate is 6% APY divided by 12 months in a year because the money compounds monthly.

    Financial Calculator:
    Input N=(5x12), I=(6/12), Pmt=-250, PV=0, and Solve for FV = 17,443

    Excel Function: "=FV(Rate, Nper, Pmt, PV, Type)"
    =FV((0.06/12), (5x12), -250, 0, 0) => 17,443

    TVM Equation: $\text{Future value of an annuity} = \text{Pmt} \times \frac{(1+\text{i})^{\text{n}}-1}{\text{i}}$

    $$\text{Future value of an annuity} = \$250 \times \frac{(1+0.005)^{60}-1}{0.005} = \$17{,}443$$

    Format: Multiple Choice
    Title: Test Bank 2.3 FVA Calculation
    Section: How Much Will My Money Grow?
    Learning Objective: 2.3 Explain how compound interest benefits investors.
    Difficulty: Hard
    Bloomcode: Synthesis
    AACSB: Analytic
    Expected Time to Complete: 4 minutes

54. If you are investing $2,500 a year (end-of-year payments) into a retirement account that earns 9% interest annually, how much will you have at the end of 20 years?

    A) $14,011
    B) $127,900
    C) $139,400
    D) $141,911

    Answer: B
    Solution: Calculate the future value of a $2,500 annuity for 20 years at 9% APY.

    Financial Calculator:
    Input N=20, I=9, Pmt=-2500, PV=0, and Solve for FV = 127,900

Excel Function: "=FV(Rate, Nper, Pmt, PV, Type)"
=FV(0.09, 20, -2500, 0, 0) => 127,900

TVM Equation: $\text{Future value of an annuity} = \text{Pmt} \times \frac{(1+i)^n - 1}{i}$

$$\text{Future value of an annuity} = \$2{,}500 \times \frac{(1+0.09)^{20}-1}{0.09} = \$127{,}900$$

Format: Multiple Choice
Title: Test Bank 2.3 FVA Calculation
Section: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

55. You plan to invest $2,000 every year (end-of-year payments) from now until you retire in 30 years. If you can earn 7% annually on your invested funds, how much will you have when you retire?

A) $15,225
B) $25,081
C) $188,922
D) $204,146

Answer: C
Solution: Calculate the future value of a $2,000 annuity for 30 years at 7% APY.

Financial Calculator:
Input N=30, I=7, Pmt=-2000, PV=0, and Solve for FV = 188,922

Excel Function: "=FV(Rate, Nper, Pmt, PV, Type)"
=FV(0.07, 30, -2000, 0, 0) => 188,922

TVM Equation: $\text{Future value of an annuity} = \text{Pmt} \times \frac{(1+i)^n - 1}{i}$

$$\text{Future value of an annuity} = \$2{,}000 \times \frac{(1+0.07)^{30}-1}{0.07} = \$188{,}922$$

Format: Multiple Choice
Title: Test Bank 2.3 FVA Calculation
Section: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium

Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

56. You plan to invest $1,500 every year (beginning-of-year payments) for the next 10 years. If you can earn 9% on your invested funds, how much will you have in 10 years?

A) $22,789
B) $24,840
C) $28,391
D) $22,406

Answer: B
Solution: Calculate the future value of a $1,500 annuity due for 10 years at 9% APY.

Financial Calculator:
Set Annuity to BEG, Input N=10, I=9, Pmt=-1500, PV=0, and Solve for FV = 24,840

Excel Function: "=FV(Rate, Nper, Pmt, PV, Type)"
=FV(0.09, 10, -1500, 0, 1) => 24,840

Format: Multiple Choice
Title: Test Bank 2.3 FVA-Due Calculation
Section: How Much Will My Money Grow?
Learning Objective: 2.3 Explain how compound interest benefits investors.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

57. The process of calculating present value is known as

A) compounding.
B) discounting.
C) annuitizing.
D) averaging.

Answer: B
Solution: The process of calculating present value is known as discounting.
Format: Multiple Choice
Title: Test Bank 2.4 Present Value
Section: Present Value: How Much Do I Need Today to Reach a Future Goal?
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.

Difficulty: Easy
Bloomcode: Knowledge
AACSB: Analytic
Expected Time to Complete: 1 minute

58. One year from now, you need to have $5,000 to pay your tuition. How much do you need to invest today if you can earn 10% interest, compounded annually?

A) $3,355.75
B) $3,875.25
C) $4,000.55
D) $4,545.45

Answer: D
Solution: Calculate the present value of a $5,000 lump sum a year from now at 10% APY.

Financial Calculator:
Input N=1, I/Y=10, FV=5000, and Solve for PV = -4,545.45

Excel Function: "=PV(Rate, Nper, Pmt, FV, Type)"
=PV(0.10, 1, 0, 5000, 0) => 4,545.45

TVM Equation: $\text{Present value of a lump sum (PV)} = \text{FV} \times \left(\frac{1}{1+\text{i}}\right)^{\text{n}}$

$\text{Present value of a lump sum (PV)} = \$5{,}000 \times \left(\frac{1}{1+0.10}\right)^{1} = \$4{,}545.45$

Format: Multiple Choice
Title: Test Bank 2.4 PV Calculation
Section: Present Value of a Lump Sum
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 2 minutes

59. You expect to receive a sum of money 10 years from now, and you want to know how much it is worth today. Which time value of money calculation should be used to solve this problem?

A) Present value of a lump sum
B) Future value of a lump sum
C) Present value of an annuity
D) Future value of an annuity

Answer: A
Solution: *Present value of a lump sum* is the discounted value of the future sum, by the APR over the time frame of 10 years.
Format: Multiple Choice
Title: Test Bank 2.4 Present Value
Section: Present Value of a Lump Sum
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

60. You can afford to make $100 monthly payments for three years, and you want to know how much you can borrow based on this payment amount. Which type of time value of money calculation should be used to solve this problem?

A) Present value of a lump sum
B) Future value of a lump sum
C) Present value of an annuity
D) Future value of an annuity

Answer: C
Solution: The present value of a $100 monthly amortization payment over three years at a particular APR represents the loan value.
Format: Multiple Choice
Title: Test Bank 2.4 Determine Which Type of TVM
Section: Present Value of an Annuity
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

61. You just won a $20 million lottery. You can choose either receiving $8 million today or $800,000 per year for 25 years. Which time value of money calculation should you use to decide between these two alternatives?

A) Future value of a lump sum
B) Present value of a lump sum
C) Future value of an annuity
D) Present value of an annuity

Answer: D
Solution: You need to calculate the present value of the $800,000 annuity over 25 years at your APR to determine if this option is better than $8 million.
Format: Multiple Choice
Title: Test Bank 2.4 Determine Which Type of TVM
Section: Present Value of an Annuity
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

62. You just won a $20 million lottery. You can choose either receiving $8 million today or $800,000 per year for 25 years. Assuming you think you, can earn 8% per year on your investments, compounded annually, which of these alternatives is preferable?

A) $8 million lump sum is preferable because the annuity is worth $2,920,358.
B) $8 million lump sum is preferable because the annuity is worth $7,854,518.
C) Annuity is preferable because it is worth $8,539,821 to you.
D) Annuity is preferable because it's worth $20 million

Answer: C
Solution: Calculate the present value of an $800,000 annuity over 25 years at 8% APR.

Financial Calculator:
Input N=25, I/Y=8, Pmt=800000, FV=0, and Solve for PV = -8,539,821

Excel Function: "=PV(Rate, Nper, Pmt, FV, Type)"
=PV(0.08, 25, 800000, 0, 0) => -8,539,821

TVM Equation: $\text{Present value of an annuity (PVA)} = \text{PMT} \times \frac{1-\left(\frac{1}{1+\text{i}}\right)^{\text{n}}}{\text{i}}$

$$\text{Present value of an annuity (PVA)} = \$800{,}000 \times \frac{1-\left(\frac{1}{1+0.08}\right)^{25}}{0.08} = \$8{,}539{,}821$$

Format: Multiple Choice
Title: Test Bank 2.4 PVA Calculation
Section: Present Value of an Annuity
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Hard
Bloomcode: Evaluation

AACSB: Analytic
Expected Time to Complete: 5 minutes

63. You want to receive payments of $20,000 each year (end-of-year payments) for 15 years. If you can earn 8% on your funds, how much would you have to invest today in order to reach your goal?

A) $54,304
B) $63,055
C) $171,190
D) $184,885

Answer: C
Solution: Calculate the present value of a $20,000 annuity over 15 years at 8% APR.

Financial Calculator:
Input N=15, I/Y=8, Pmt=20000, FV=0, and Solve for PV = -171,190

Excel Function: "=PV(Rate, Nper, Pmt, FV, Type)"
=PV(0.08, 15, 20000, 0, 0) => -171,190

TVM Equation: $\text{Present value of an annuity (PVA)} = \text{PMT} \times \frac{1-\left(\frac{1}{1+\text{i}}\right)^{\text{n}}}{\text{i}}$

$$\text{Present value of an annuity (PVA)} = \$20{,}000 \times \frac{1-\left(\frac{1}{1+0.08}\right)^{15}}{0.08} = \$171{,}190$$

Format: Multiple Choice
Title: Test Bank 2.4 PVA Calculation
Section: Present Value of an Annuity
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 1 minute

64. Loan amortization is based upon

A) future value.
B) future value of an annuity.
C) present value.
D) present value of an annuity.

Answer: D
Solution: Amortization is the financial term for the process of paying interest on a declining loan balance in addition to repaying some of the face value of the loan with each payment. The payments on an amortized loan are calculated so that by the time you make your last payment, you've paid off the total loan balance. The process is the same as calculating the present value of an annuity. Instead of solving for the present value, though, you solve for the payment.
Format: Multiple Choice
Title: Test Bank 2.4 Amortization
Section: Loan Payments
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Comprehension
AACSB: Analytic
Expected Time to Complete: 1 minute

65. You borrow $10,000 from your bank at 7% APR for 4 years, what will be your monthly payment?
    A) $239
    B) $253
    C) $376
    D) $421

Answer: A
Solution: Calculate the monthly payment for a $10,000 loan over 4 years at 7%APR.

Financial Calculator:
Input N=(4x12), I=(7/12), PV=10000, FV=0, and Solve for Pmt = -239

Excel Function: "=PMT(Rate, Nper, PV, FV, Type)"
=PMT((0.07/12), (4x12), 10000, 0, 0) => -239

TVM Equation: Payment on amortized loan: $\text{PMT} = \text{PVA} \times \frac{\text{i}}{1-\left(\frac{1}{1+\text{i}}\right)^{\text{n}}}$

$$\text{PMT} = \$10{,}000 \times \frac{0.005833}{1-\left(\frac{1}{1+0.005833}\right)^{48}} = \$239$$

Format: Multiple Choice
Title: Test Bank 2.4 PMT Calculation
Section: Loan Payments
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.

Difficulty: Medium
Bloomcode: Analysis
AACSB: Analytic
Expected Time to Complete: 1 minute

66. You are considering two amortized loans with the same number of months to repay and the same initial amount borrowed. If the interest rate on Loan A is _____ than the rate on Loan B, then the payment on Loan A will be _____ the payment on Loan B.

A) higher; higher than
B) higher; lower than
C) lower; higher than
D) lower; same as

Answer: A
Solution: If you are comparing two amortized loans with the same number of months to repay and the same initial amount borrowed, a higher interest rate will cause the payment amount to be higher, and vice versa.
Format: Multiple Choice
Title: Test Bank 2.4 How Interest Rates Affect Loan Payments
Section: Loan Payments
Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes

67. You are considering two amortized loans with the same interest rate and the same initial amount borrowed. If the number of months to repay Loan × is _____ than the number of months to repay Loan Y, the monthly payment on Loan × will be _____ the payment on Loan Y.
A) greater; higher than
B) greater; lower than
C) less; lower than
D) less; same as

Answer: B
Solution: If you are comparing two amortized loans with the same interest rate and the same initial amount borrowed, the greater the term to maturity, the lower the monthly payment, because the principal is stretched further out.
Format: Multiple Choice
Title: Test Bank 2.4 How the Maturity Affect Loan Payments
Section: Loan Payments

Learning Objective: 2.4 Calculate present value of funds to be received or paid in the future.
Difficulty: Medium
Bloomcode: Application
AACSB: Analytic
Expected Time to Complete: 2 minutes